Welcome to the Major Leagues

By Sharon Anderson

It was a brand new ball game for U.S. Second Fleet operations. For the first time three carrier strike groups operated together under one umbrella during Joint Task Force Exercise (JTFEX) 06-2 "Operation Bold Step." With more than 16,000 service members and 13 ships, the exercise, conducted July 21-31, 2006, closely replicated operations that military forces routinely perform around the world.

JTFEX 06-2 served as the forward-certifying event for the Dwight D. Eisenhower Carrier Strike Group (IKE CSG) and sustainment training for units from the Theodore Roosevelt CSG (TR CSG) and Bataan Expeditionary Strike Group (BAT ESG). JTFEX 06-2 also served as a significant training milestone toward Second Fleet's staff certification as a Joint Task Force (JTF) headquarters planned for 2007.

The Second Fleet staff conducted assessment, planning and execution functions with the support of U.S. Joint Forces Command, U.S. Northern Command, Coast Guard Atlantic Area, the State Department and others.

U.S. and coalition naval assets underway for the exercise included the Second Fleet flagship, USS Wasp (LHD-1), with embarked Second Fleet distributed staff, the aircraft carriers, USS Dwight D. Eisenhower (CVN 69) and USS Theodore Roosevelt (CVN 71), with associated units, and units from the USS Bataan Expeditionary Strike Group.

I Like Ike

Aboard the Eisenhower, it's easy to get caught up in the ship's rhythm. The Eisenhower and its crew — more that 6,000 of them including the air wing — are impressive. The Eisenhower is as long as the Empire State Building is tall — 1,092 feet from bow to stern. Fully loaded, it displaces almost 100,000 tons of water.

The flight deck is 4.5 acres of sovereign U.S. territory that can sail unchallenged throughout the world. Eisenhower has four massive aircraft elevators and four catapults under almost constant operation. The engine repair shop on board can change out a jet engine in less than an hour.

On the "Ike" exercise execution was fast-paced and exciting with action continuing round the clock as battle watchstanders responded to a variety of operational drills and simulated events. Although the exercise involved fictitious events, operational response from crew members was seriously focused. Most of the activity seemed to be centered in flight operations and in the command, control, communications, computers, combat systems and information (C5I) spaces.

Ship's Time

The Ike has 2,500 NIPRNET and 600 SIPRNET drops engaged continuously in warfighting communications. The combat systems information officer, Lt. Cmdr. Richard Menard said he is so busy in C5I that he averages a few hours sleep per night. "When the ship is deployed, I don't even wear a watch. It doesn't matter what time it is, there is only ship's time."

Training less experienced crew members and maintaining critical communications systems are a high priority for the Eisenhower and strike group. Crew training is important because the average age of a crew member is between 20 and 21-years-old, and according to Menard, 80 percent of the crew had never completed a work-up cycle, which the Eisenhower just finished.

"It's like that on any ship. That's why we train. All of the officers in combat systems are 'mustangs,' officers with prior enlisted service. We understand what duty is like for enlisted personnel on a carrier. By 2011, the Sailors we are training now will be the leaders on their ships."

Menard said that today's young Sailors have a good understanding of Web-based technologies before they enter the Navy. So he emphasizes training in radio frequencies and spectrum management. The C5I staff is a first-class manager of both bandwidth and radio frequencies. This is essential because robust communications are the lifeline of military operations. Most of the combat systems are high-frequency driven, according to Menard.

"We also train in basic and advance fleet communications, which encompasses both voice and data systems using the latest technology, but we must never forget the old ways of communications, high frequency (HF) and spectrum management. This is becoming a lost art and very few of us old timers (radioman) are left. We must continue to train our Sailors in all aspects of communications, new and old, to fully support the fleet," Menard said.

C5I keeps IT-21 and the COMPOSE networks up and running.

Aboard the USS Eisenhower (CVN 69) during Joint Task Force Exercise (JTFEX) 06-2 "Operation Bold Step" - On a tour of C5I spaces, Ensign Truitt Smith explains the advanced technologies and systems used for naval communications. Far right - Lt. Cmdr. Richard Menard (standing) and Cmdr. James Boozer coordinate C5I planning for Operation Bold Step communications with the carrier strike groups, coalition and interagency participants.

COMPOSE, or Common PC Operating System Environment, is the new shipboard network (encompassing servers and personal computer clients) that the Program Executive Office for Command, Control, Communications, Computers and Intelligence (PEO C4I) PMW 160 is fielding to replace the IT-21 afloat system. *(See page 33.)*

In many ways, COMPOSE is the Navy's afloat version of the Navy Marine Corps Intranet. Although the NMCI is not installed on ships, the air wing and destroyer squadrons use NMCI "embarkables" or laptops, which C5I sets up for the air wing aboard the Eisenhower.

C5I

Combat systems personnel provided multifaceted communications support to the entire strike force, which included three "big decks" — the Teddy Roosevelt, Eisenhower and the amphibious assault ship, USS Bataan (LHD 5).

On a tour of the communications spaces, referred to as "MAIN COMMS" or "RADIO," Ensign Truitt Smith, radio officer and Electronic Key Management System manager, explained that C5I personnel are trained to troubleshoot problems on all of the systems. "We don't separate jobs; everyone in here knows both sides — tech control and naval messaging."

The state-of-the art, pristine environment houses links for SIPRNET and NIPRNET; the Joint Worldwide Intelligence Communications System (JWICS) and other datalinks for intelligence; the Tomahawk missile system; Global Positioning System; CNN feeds; multilevel chat; imagery networks; voice nets; warfare collaboration tools; and much more.

Maintaining a technology edge is fundamental to decisive military action, and according to Smith, the devices, systems and networks are continuously being improved. "Next year, everything you see here will be replaced with something better."

According to Menard, although the communications requirements were complex — involving air, surface and subsurface operations — the systems and networks operated as planned during the exercise.

"Rear Adm. Allen Myers (Commander, Carrier Strike Group 8 and Commander, Dwight D. Eisenhower Carrier Strike Group) has a very good understanding of C4 systems and technology, which makes our jobs easier," Menard said.

Planning and coordination were the chief reasons why C5I responded effectively to the demand for real-time, flexible, reliable communications to link participants in the exercise. The C5I staff staged about 90 video teleconferences during the exercise, often with very short notice, according to Cmdr. William Boozer, the "N6" and assistant chief of staff for C5I.

"The exercise has been challenging for the C5I organization because this is the first time that the expeditionary strike force has come together in an environment like this. We have never operated with three strike groups under one umbrella. My role in this as the ESF N6, the person responsible for those C5I functions, was challenging because of the large number of players.

"A typical day consisted of making sure all of the warfare commanders' voice nets were up. We established successful communications with our coalition partners including the French submarine, FS Émeraude. We were able to satisfactorily communicate with them via voice and Battle Force E-mail, which is used for our NATO coalition partners," Boozer said. "We worked closely with the LNOs from the other nations, the liaison officers, who worked with us side-by-side."

InfoWorkSpace (IWS), a real-time virtual environment for information sharing, and the Combined Enterprise Regional Information Exchange System (CENTRIXS), a coalition network specially designed to operate under multilevel security requirements, were also used.

Watcherstanders in "MAIN COMMS" responding to simulated threats. Photo courtesy of Mike Gallagher, Airshow Photography.

Lessons learned will be passed on for future communications planning. But several days into the exercise, Boozer e-mailed preliminary reports to his former boss, Naval Network Warfare Command executive assistant, Capt. Michael Maliniak, about the challenges and successes of executing a communications strategy the scope of Operation Bold Step.

"Welcome to the 'Major Leagues,'" Maliniak replied.
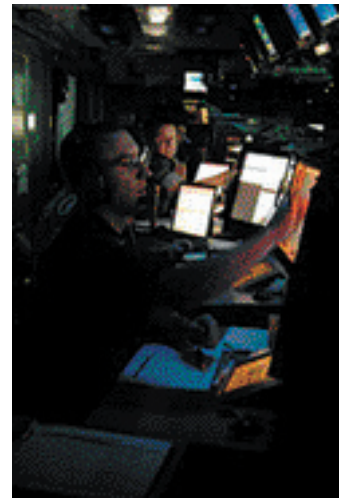
Precision Chaos

Each day of the exercise, flight operations typically began about 1300 and concluded at 0200. Carrier Wing 7 commander and air boss Capt. "Bud" Bishop coolly directed operations from the air tower overlooking the flight deck. With more than 70 aircraft on board, including the EA-6B Prowler, F/A-18 Hornet and the EC-2 Hawkeye, there is never a dull moment.

The controlled chaos of flight "ops" is skillfully performed by flight deck personnel who seem to be so in sync with the movement of aircraft that they perform their duties intuitively.

Lt. Chris Wood of the "Pukin Dogs," referred to Bishop as the "CAG" or carrier air wing commander, whose orders are strictly followed by flight operations personnel on deck, as well as in the hangar bay, and air command and control rooms within the ship.

It's hard to believe that anyone could hear anything over the roar of the jet engines, but flight crew members said, "No one misses a word the air boss has to say."

Carrier Wing 7 includes the "Tigertails" of Early Airborne Warning Squadron One Two Five (VAW 125); the Pukin Dogs of Fighter Squadron One Four Three (VF-143); the "Wildcats" of Strike Fighter Squadron One Three One (VFA-131); the "Jolly Rogers" of VFA-103; the "Patriots" of Electronic Attack Squadron One Four Zero (VAQ-140);

the "Rampagers" of VFA-83; the "Nightdippers" of Helicopter Anti-submarine Squadron Five (HS-5); and the "Rampagers" of Fleet Logistics Support Squadron Four Zero (VRC-40).

The E-2C Hawkeye, flown by VAW 125, is the Navy's all-weather, carrier-based tactical battle management airborne early warning, command and control aircraft. The E-2C is a twin engine, five-crew member, high-wing turboprop aircraft with a 24-foot diameter radar rotodome attached to the upper fuselage. An integral component of the carrier strike group air wing, the E-2C uses computerized radar, Identification Friend or Foe, and electronic surveillance sensors to provide early warning, threat analysis against potentially hostile air and surface targets.

Referred to as the "sexiest plane in the Navy" by one of its crew members, the primary mission of the EA-6B Prowler is to support strike aircraft and ground troops by interrupting enemy electronic activity and obtaining tactical electronic intelligence within the combat area. The Prowler holds a pilot and three electronic countermeasures officers.

The F/A-18 Hornet, an all-weather aircraft, is used as an attack aircraft as well as a fighter. In its fighter mode, the F/A-18 is used primarily as a fighter escort and for fleet air defense; in its attack mode, it is used for force projection, interdiction and close and deep air support.

Flight deck temperatures soared above 100 F during the exercise, but the flight deck crew, clad in brightly colored jerseys and safety gear, were undaunted. In response to a question about the exercise, one crew member said, "I know there is an exercise going on, but all I really care about is launch and recovery — making sure the planes launch and return safely."

Atop "vulture's row," Sailors and visitors can get a bird's eye view of flight operations while an SH-60F Seahawk helicopter flies plane guard. On the flight deck, crash and salvage firefighting equipment and personnel are a sober reminder that flight ops personnel work long, dangerous hours.

Inside the ship, flight deck handlers scrutinize the "Ouija Board," a scale model of the flight deck, hangar bay and aircraft on board used for plane placement and flight operations coordination.

Topside, the Military Sealift Command oiler, USNS John Lenthall (T-AO 189), sails alongside the Ike until it's precisely 180 feet from the Eisenhower for an underway refueling. As the Eisenhower's "XO" calls a greeting to the captain and crew of the Lenthall, personnel on deck are already manning lines to position the huge hoses for pumping fuel on board.

Routine shipboard activities go on in addition to exercise operations — brass is shined, equipment is repaired, and the crew rests, eats and works out in the fitness centers. On one such day during the exercise, Menard's promotion to lieutenant commander took place.

"I was pinned by the Commanding Officer Capt. Cloyd and the Command Master Chief of CVW-7, Russell Busby. Master Chief Busby

July 21, 2006 – View from the hangar bay of the USS Eisenhower, Military Sealift Command oiler USNS John Lenthall (T-AO 189) alongside the Eisenhower during an underway refueling.

July 21, 2006 – Aboard the USS Eisenhower flight operations continue sometimes for more than 13 hours a day.

and I have known each other for over 24 years. Back in 1982 he was my sponsor on my first ship, USS Benjamin Stoddert (DDG 22), out of Pearl Harbor, Hawaii. He was a 3rd class petty officer and I was a seaman recruit. We did our first deployment together, and now 25 years later, we are getting ready to do our last deployment together.

Throughout the exercise steadily watching from the bridge, Capt. Dan Cloyd and Executive Officer Capt. Tushar Tembe monitored exercise events, ship operations and flight ops.

Always in the background are the unmistakable voices of the air boss and XO, the hum of the ship's systems and networks, the powerful growl of aircraft on the move — and in the forefront — the ship's crew — valiant and indefatigable.

For more information about the Eisenhower and its crew, go to http://www02.clf.navy.mil/eisenhower/.

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